

AMENDMENTS TO THE CLAIMS

Claims 1-22. (*cancelled*)

Claim 23. (*currently amended*) A method for improving the precision in counting the number of particles or cells suspended in a given volume of a test sample [~~that~~] **wherein the number of particles or cells** ranges from low particle/cell counts to high particle/cell counts, comprising:

- 5 a) delivering a sheath stream of the test sample at a first volumetric flow rate to a [~~detection means for counting~~] **particle counting means to count** the number of particles or cells in the test sample, wherein the sheath stream has a cross-sectional diameter adapted to deliver to said [~~detection~~] **particle counting** means substantially
- 10 one particle or cell [~~at~~] **of** the test sample at a time;
- b) making an initial count **at the first volumetric flow rate** of the particles or cells of said test sample per unit time with said [~~detection~~] **particle counting** means;
- c) comparing the initial count of the number of cells or particles in the
- 15 test sample to a reference value;
- d) adjusting the flow rate of the test sample to a second volumetric flow rate based on the comparative number of cells or particles in the test sample to the reference value, thereby improving the

precision of the [~~detection~~] particle counting means in counting the
20 number of cells or particles in the test sample

Claim 24. (*previously presented*) The method of claim 23,
wherein the second volumetric flow rate optimizes the ability of the detection
means to make a precise count of the particles or cells in the test sample.

Claim 25. (*previously presented*) The method of claim 23,
wherein the test sample is a hematology sample.

Claim 26. (*previously presented*) The method of claim 23,
wherein the first volumetric flow rate of the sheath fluid is at laminar flow.

Claim 27. (*previously presented*) The method of claim 23,
wherein the detection means is magnetic.

Claim 28. (*previously presented*) The method of claim 23,
wherein the detection means is optical.

Claim 29. (*previously presented*) The method of claim 23,
wherein the detection means is a laser beam.